WHAT IS CLAIMED IS:

1. A method for receiving a signal, the method comprising:

sampling the received signal to produce a stream of received samples, the stream of received samples comprising a first set of received samples followed by a second set of received samples;

correlating said first set of received samples with a primary synchronization code to form a first slot timing estimate;

generating a second slot timing estimate based at least in part on said second set of received samples; and

decoding a secondary synchronization code word based on said first slot timing estimate, said second slot timing estimate and said second set of received samples.

2. The method of claim 1 wherein said decoding comprises testing the validity of said first slot timing estimate based on said generating.

3. The method of claim 1 wherein said testing comprises comparing said first slot timing estimate with said second slot timing estimate.

4. The method of claim 1 further comprising determining a validity of said secondary synchronization code word based on said testing.

5. The method of claim 1 further comprising accumulating said first set of received samples over an integer number of slot periods.

6. The method of claim 1 wherein said integer number of slot periods is equal to an integer multiple of a number of slot periods in a frame period.

7. The method of claim 5 wherein said integer multiple is greater than one.

8. The method of claim 1 wherein said accumulating is performed over a period longer than one frame.

9. The method of claim 1 wherein said correlating comprises:

measuring a correlation of a primary synchronization code sequence with said first set of received samples at each of a predetermined number of bin offsets to form a correlation energy corresponding to each of said predetermined number of bin offsets; and

selecting said first slot timing estimate based on a bin offset having the greatest corresponding correlation energy.

10. The method of claim 8 wherein said measuring is performed using digital matched filtering.

11. The method of claim 1 wherein said decoding comprises measuring a correlation between each of a predetermined set of secondary synchronization code words and a predetermined portion of said second set of received samples.

12. The method of claim 1 wherein said measuring utilizes a soft decision block decoding technique.

13. The method of claim 11 wherein said soft decision block decoding technique utilizes the Chase algorithm.

14. An apparatus for receiving a signal comprising:

sampler for sampling a received signal to produce a stream of received samples, the stream of received samples comprising a first set of received samples followed by a second set of received samples;

primary synchronization code detector for accumulating the stream of received samples, forming a first slot timing estimate based on the first set of received samples, forming a second slot timing estimate based at least in part on the second set of received samples, and testing a validity of the first slot timing estimate based on said first and second slot timing estimates; and

secondary synchronization code detector for decoding a first secondary synchronization code word based on a selected portion of the second set of received samples and said validity of the first slot timing estimate, wherein the selected portion is selected based on the first slot timing estimate, and wherein the decoding produces a frame timing estimate.

15. The apparatus of claim 14 wherein said primary synchronization code detector comprises a slot buffer for accumulating received samples into a predetermined number of sample bins.

16. The apparatus of claim 14 wherein said predetermined number is equal to a number of samples in a single slot.

17. The apparatus of claim 1 wherein said predetermined number is equal to an integer multiple of a number of samples in a slot.

18. The apparatus of claim 1 wherein each sample accumulated in the slot buffer is added to a value stored in a sample bin having a sample bin offset corresponding to the sample, and wherein the value stored in the sample bin having the sample bin offset is replaced with the resultant sum.

19. The apparatus of claim 1 wherein said primary synchronization code detector further comprises a matched filter for measuring a primary synchronization code correlation energy for each of said predetermined number of sample bins.

20. The apparatus of claim 18 wherein said matched filter performs said measuring using real and imaginary correlation energy values for each of said predetermined number of sample bins.

21. The apparatus of claim 1 wherein said secondary synchronization code detector comprises a secondary synchronization code sample buffer for accumulating, the selected portion.

22. The apparatus of claim 20, wherein said secondary synchronization code detector further comprises a secondary synchronization channel correlator for choosing the first secondary synchronization code word from a predetermined set of secondary synchronization code words.

23. The apparatus of claim 21, wherein said secondary synchronization channel correlator measures a correlation energy for each of said predetermined set of secondary synchronization code words, and wherein said first secondary synchronization code word has the greatest measured correlation energy.

24. The apparatus of claim 1 further comprising pilot detector for estimating a pilot channel offset based on the frame timing estimate.

25. The apparatus of claim 1 further comprising a control processor for testing the validity of the first slot timing estimate based on the second slot timing estimate, to produce a slot timing validity.

26. The apparatus of claim 24 further comprising a pilot detector for estimating a pilot channel offset based on the frame timing estimate and on the slot timing validity.

27. An apparatus for receiving a signal comprising:

means for sampling the received signal to produce a stream of received samples, the stream of received samples comprising a first set of received samples followed by a second set of received samples;

means for correlating said first set of received samples with a primary synchronization code to form a first slot timing estimate;

means for generating a second slot timing estimate based on said first set of received samples and said second set of received samples; and

means for decoding a secondary synchronization code word based on said first slot timing estimate, said second slot timing estimate and said second set of received samples.